REBUTTAL TESTIMONY OF

BRADLEY T. PERRICELLI

ON BEHALF OF

DOMINION ENERGY SOUTH CAROLINA, INC.

DOCKET NO. 2023-9-E

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION**

2 **WITH DOMINION ENERGY SOUTH CAROLINA, INC. ("DESC" OR**

3 **"COMPANY").**

4 A.   My name is Bradley Perricelli and my business address is 220 Operation

5 Way, Cayce, South Carolina. I am employed by Dominion Energy South Carolina,

6 Inc. ("DESC" or the "Company") as the Senior Energy Market Analyst.

7 **Q. ARE YOU THE SAME BRADLEY T. PERRICELLI WHO PREVIOUSLY**

8 **TESTIFIED IN THIS DOCKET?**

9 A.   I am.

10 **Q. HAVE YOU REVIEWED THE DIRECT TESTIMONY OF WITNESS**

11 **DEREK STENCLIK AND WITNESS JIM GREVATT ON BEHALF OF THE**

12 **SOUTH CAROLINA COASTAL CONSERVATION LEAGUE, SOUTHERN**

13 **ALLIANCE FOR CLEAN ENERGY (COLLECTIVELY, "CCL/SACE"),**

14 **AND SIERRA CLUB, AND THE DIRECT TESTIMONY OF WITNESS**

15 **LEAH WELLBORN, WITNESS ANTHONY SANDONATO AND WITNESS**

1 PHILIP HAYET ON BEHALF OF THE SOUTH CAROLINA OFFICE OF

2 REGULATORY STAFF ("ORS")?

3 A.   I have.

4 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

5 A.   The purpose of my rebuttal testimony is to respond to the recommendation

6 of the ORS to perform a more detailed analysis to assess reasonableness of

7 Residential and Commercial class peak load forecasts, and to support the

8 assumption that average peak load for residential and commercial customers will

9 remain constant. Also, I will respond to Witness Stenclik's testimony where he

10 states that DESC is being overly conservative in the winter peak demand forecasts

11 by layering in assumptions on the risk.

12 Q. PLEASE EXPLAIN HOW THE ADJUSTMENTS MADE TO THE

13   RESIDENTIAL AND COMMERCIAL CLASS PEAK LOAD FORECASTS

14   IN THE 2023 IRP ARE REASONABLE.

15 A.   The adjustments made to the Residential and Commercial class for the

16 Winter Peak load/customer presented in Table 6 of the ORS Report appear to be

17 mislabeled as units of "kW" while the numerical values are expressed in units of

18 "MW." This gives the impression of a much smaller reduction than is the case. This

19 table has been reproduced below in Table 1 below to show a comparison with

20 consistent units.

21   It should be noted that these values are net of EVs and energy efficiencies.

22 DESC is expecting to see increases in EV loads even for winter peaks, which would

1   offset expected decreases from energy efficiencies. The EV load is based on the

2   Guidehouse study, and most energy efficiency totals are based on the 2023 DSM

3   Potential Study. These are very comprehensive and detailed analyses.

4   **Table 1. ORS Table 6 with Corrected for kW value and showing break-out of**

5   **EV and EE values**

| Year	Residential Winter Peak Load/Customer (kW)	Residential EV Adjustment Per Customer (kW)	Residential EE Adjustment Per Customer (kW)	Net Residential Adjustment Per Customer (kW)	%	Commercial Winter Peak Load/Customer (kW)	Commercial EV Adjustment Per Customer (kW)	Commercial EE Adjustment Per Customer (kW)	Net Commercial Adjustment Per Customer (kW)	%
2024	3.77	0.000	-0.026	-0.026	-0.69%	13.60	0.010	-0.078	-0.068	-0.50%
2025	3.77	0.001	-0.042	-0.040	-1.07%	13.60	0.010	-0.106	-0.096	-0.70%
2026	3.77	0.001	-0.057	-0.055	-1.47%	13.60	0.019	-0.133	-0.114	-0.84%
2027	3.77	0.003	-0.070	-0.067	-1.79%	13.60	0.028	-0.170	-0.141	-1.04%
2028	3.77	0.003	-0.082	-0.079	-2.10%	13.60	0.047	-0.205	-0.159	-1.17%
2029	3.77	0.004	-0.096	-0.092	-2.44%	13.60	0.065	-0.231	-0.167	-1.23%
2030	3.77	0.007	-0.110	-0.103	-2.73%	13.60	0.092	-0.266	-0.174	-1.28%
2031	3.77	0.009	-0.123	-0.114	-3.02%	13.60	0.127	-0.291	-0.164	-1.21%
2032	3.77	0.012	-0.135	-0.123	-3.27%	13.60	0.181	-0.316	-0.135	-1.00%
2033	3.77	0.016	-0.150	-0.134	-3.55%	13.60	0.233	-0.340	-0.107	-0.79%
2034	3.77	0.018	-0.161	-0.143	-3.79%	13.60	0.302	-0.364	-0.062	-0.46%
2035	3.77	0.022	-0.175	-0.153	-4.06%	13.60	0.379	-0.379	0.000	0.00%
2036	3.77	0.025	-0.187	-0.161	-4.28%	13.60	0.454	-0.402	0.052	0.38%
2037	3.77	0.029	-0.190	-0.161	-4.27%	13.60	0.546	-0.399	0.147	1.08%

7   **Q.   DO YOU AGREE WITH ORS THAT THE AVERAGE PEAK LOAD PER**

8   **RESIDENTIAL   AND   COMMERCIAL   CLASS   WILL   REMAIN**

9   **ESSENTIALLY CONSTANT OVER THE FORECAST HORIZON?**

10   A.   No, I do not. By the year 2037, the residential class is forecasted to reduce

11   its average peak load by approximately 4%. The commercial class is forecasted to

12   reduce its average peak load approximately 1.25% through 2030 before increasing

13   by 1.00% in 2037. This is after the considerations for increases due to EV load.

1 **Q.** **DO YOU AGREE WITH WITNESS STENCLIK'S CONCERNS THAT**

2 **DESC IS BEING OVERLY CONSERVATIVE IN ITS WINTER PEAKS BY**

3 **LAYERING ASSUMPTIONS ON THE RISK OF WINTER PEAKS THAT**

4 **RESULT IN POTENTIAL DOUBLE COUNTING THE WINTER RISK?**

5 A. No. DESC is not double counting the winter risk. Witness Stenclik's

6 statement is based only on a comparison of the historical average of the winter

7 peaks. This does not consider the various factors that can affect a winter peak such

8 as variations in weather from historical averages, the timing of the peak, customer

9 growth, and whether the company interrupts any customers to maintain reliability

10 standards amongst other factors. Table 2 below clearly shows the relationship

11 between the minimum temperature on the day of the peak, and the peak load for the

12 past ten years found in Exhibit DS-08 of Witness Stenclik's testimony. The lower

13 winter peaks in recent years are in part a function of warmer weather and not a lack

14 of demand potential on the DESC system.

1   **Table 2. Winter Peak Forecast Comparison (MW)**

Winter Peak Load (MW) and Min Temp
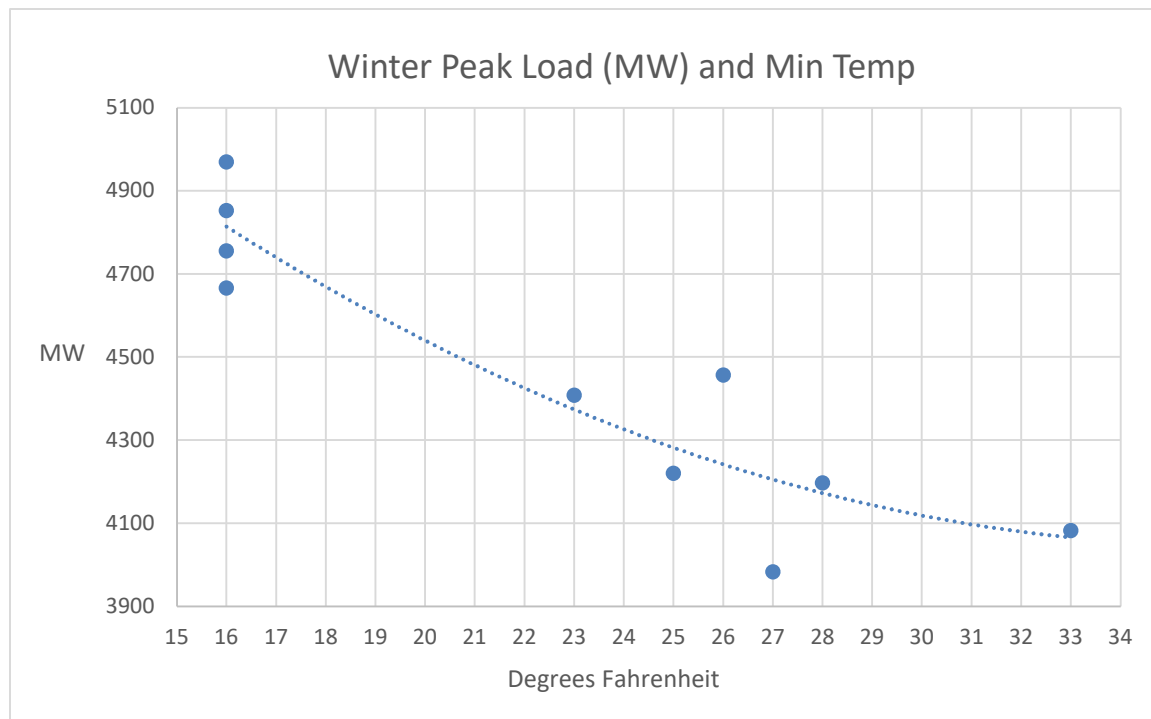
3   Further, the timing of Winter Storm Elliott was over the Christmas holiday

4   when schools, government offices, and many businesses were closed. Naturally,

5   usage was less as a result. Had Winter Storm Elliott occurred during a regular work

6   and school week, and not a holiday, the peak could have been much higher. Lastly,

7   in the data from Exhibit DS-08, you can see the winter peak from 2015 reached

8   4,970 MW which reinforces that a forecasted peak of 4,902 MW is reasonable.

9   Conservative forecasts are necessary to ensure reliability for the customers that rely

10   on DESC. As Witness Wintermantel testifies, the reserve margin study properly

11   accounts for the uncertainty in extreme weather and there is no double counting

12   between the reserve margin and load forecasts.

1   **Q.**   **DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

2   A.   Yes